REMARKS

The Office Action, mailed May 27, 2009, considered and rejected claims 1-33 and 35-37. Claims 1-8, 10-22 and 24-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Lamb* (U.S. Patent No. 6,892,264) in view of *Iwami* (U.S. Publ. No. 2002/0156867), and further in view of *Thrasher* (U.S. Patent No. 7,275,103). Claims 9 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Lamb* in view of *Iwami* and *Thrasher*, and further in view of *Kuik* (U.S. Patent No. 7,165,258). Claims 32, 33, and 35-37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Lamb* in view of *Iwami* and *Thrasher*, and further in view of *Chadalapaka* (U.S. Patent No. 6,845,403).[1]

By this paper, claims 1, 10, 15, 24, 29 and 32 are amended, claims 9 and 23 are cancelled, and no claims are added. Accordingly, following entry of this paper, claims 1-8, 10-22, 24-33 and 35-37 remain pending, of which claims 1, 15, 29 and 32 are the independent claims at issue.

The presently claimed embodiments are directed to providing access to a virtual SCSI device over a network. Claim 1, for example, recites a method of a method for providing the client system access to one or more of the devices through a network provider. In the method, one or more devices are first identified that can be accessed locally or over a network. Such one or more devices include a virtual SCSI device accessible through an iSCSI protocol. A target that identifies a set of the one or more devices is then generated with the target including at least one corresponding device identifier, wherein the set of one or more devices is identified based on each of the devices having at least one common group of clients authorized to access the devices. Client authorization information identified by the network provider is associated with the target that identifies the set of the one or more devices. The target is then dynamically assigned to a port through a protocol-independent port driver at the network provider such that only clients authorized by the associated client information are allowed to access the assigned port, thereby allowing only the clients access to the set of the one or more device through the target, wherein the assignment of the port is dependent upon load balancing of the network provider.

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[1] Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

It will be noted that the independent claims essentially incorporate the subject matter of claims 9 and 23 as previously presented, namely that the device is a virtual SCSI device accessible through an iSCSI protocol. Accordingly, Applicant respectfully traverses the rejections of claims 9 and 23. Specifically, Applicant notes that the cited combination is improper because the references would not have been combined by one skilled in the art in view of the express teaching away of *Thrasher* with respect to SCSI devices and protocols.

In particular, it is axiomatic that the central inquiry in determining obviousness is whether the claims as a whole would have been obvious, and not whether the differences themselves would have been obvious. I that regard, the prior art must be considered in its entirety, including any disclosures that teach or lead away from the claimed invention. (M.P.E.P. 2141.02).

In that regard, Applicant notes that *Thrasher* is particularly instructive as it relates to the use of SCSI architecture. For example, *Thrasher* notes that large organizations have previously relied heavily on SCSI technology; however "the restrictions imposed by SCSI architecture are too costly for SCSI to continue as a viable solution." Indeed, *Thrasher* further expounds on various specific restrictions of SCSI and also notes that even where storage arrays reside directly on the network than through he SCSI connection, it "adds a significant load to the network, which frequently is already starved for bandwith." (Col. 1, ll. 10-33).

Thrasher thus notes that storage area network (SAN) models place storage on their own dedicated network and remove data storage from the SCSI bus, and that the objective of the invention in *Thrasher* is to provide a mechanism to proactively identify SAN bottlenecks and to reconfigure SAN pathing on the fly to improve the flow of data through a SAN. (Col. 1, ln. 34 to Col. 2, ln. 2). Indeed, the Office cited the improvement of flow of data and proactive identification of bottlenecks in a SAN as the very reason why one skilled in the art would incorporate the teachings of *Thrasher* into the other cited art. (Office Action, p. 4).

Notably, *Thrasher* thus proposes a solution that eliminates the specifically criticized and discredited SCSI technology by instead modifying SAN models. In other words, the operation of *Thrasher* is to use SAN instead of SCSI and then modify the prior SAN principles in a manner that identifies and corrects for bottlenecks. *Thrasher* does so by not merely disclosing

an alternative to SCSI, but by specifically criticizing, discrediting, and otherwise discouraging the use of SCSI.

Such teachings of *Thrasher* are clearly relevant inasmuch as the claims specifically include virtual SCSI devices accessible through iSCSI protocols. In view of the specific teaching away of *Thrasher* of the use of SCSI systems, a reason to include SCSI protocols must come from other art. Moreover, such art would necessarily need to conflict with *Thrasher* as the latter not only is devoid of use of SCSI, but actively teaches against the same. Specifically, to incorporate the principles of *Thrasher* with other art would require findings of suggestions that outweigh the teaching away of *Thrasher*. (M.P.E.P. § 2143.01(V)). Applicant respectfully submits that upon a review of the other cited art, the weight of the art suggests the undesirability of SCSI, and thus teaches away from the claimed combination.

For example, *Lamb* discloses the use of an SCSI bus and port driver in connection with masked and unmasked LUN's. Notably, however, nothing in *Lamb* appears to give any reason why SCSI must or should be used over other protocols. Indeed, *Lamb* also indicates that an SAN can be used and, when combined with *Thrasher*, there is the clear teaching to avoid SCSI and instead incorporate the more modern technology of *Thrasher*.

Kuik is also no more instructive in this regard. Specifically, *Kuik* discloses a system of utilizing SCSI-based SAN's using an SCSI router that routes traffic between SCSI and IP networks. Notably, *Kuik* does disclose that SAN's can be complex and costly. *Kuik* does not, however provide any benefit of the SCSI over a system such as that in *Thrasher* with HBA porting; however, *Thrasher* fully discredits the SCSI-based systems such as that of *Kuik*.

Accordingly, upon a review of the cited art, and weighing the teachings thereof, Applicant respectfully submits that one skilled in the art would have concluded that SCSI was costly, restrictive, and carries too high of a load, and would have therefore incorporated the HBA porting of *Thrasher* as opposed to the SCSI features of *Kuik* and *Lamb*.

Applicant further notes that the claims further recite "virtual SCSI" devices, which appears to have been interpreted by the Office as merely "SCSI" devices. Applicant respectfully submits that such is clear error inasmuch as "[a]ll words must be considered in judging the patentability of that claim against the prior art." (M.P.E.P. § 2143.03). Specifically, the Office cites to portions of *Lamb* that relate to an "SCSI port driver" and an "SCSI miniport

driver" and "SCSI HBA". (*Lamb*, Col. 59, ll. 5-15; Col. 63, ll. 60-67). Such disclosure is devoid, however, of an SCSI device that is "virtual" in any way, as recited in the claims. Accordingly, the Office fails to provide due weight to each word in the claims, and has therefore failed to meet its burden to provide a *prima facie* case of obviousness.

In view of the foregoing, Applicant respectfully submits that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time. It will be appreciated, however, that this should not be construed as Applicant acquiescing to any of the purported teachings or assertions made in the last action regarding the cited art or the pending application, including any official notice. Instead, Applicant reserves the right to challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has relied on any Official Notice, explicitly or implicitly, Applicant specifically requests that the Examiner provide references supporting the teachings officially noticed, as well as the required motivation or suggestion to combine the relied upon notice with the other art of record.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at (801) 533-9800.

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Respectfully submitted,

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